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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,751	09/17/2003	Gregory M. Marocco	12388.12	2626

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LITMAN LAW OFFICES, LTD.
P.O. BOX 15035 CRYSTAL CITY STATION
ARLINGTON, VA 22215

EXAMINER

COLON SANTANA, EDUARDO

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/663,751	Applicant(s) MAROCCO, GREGORY M.	
	Examiner Eduardo Colon-Santana	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1,8 and 10-17 is/are rejected.
- 7) ☒ Claim(s) 2-7 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5 pages</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|---|--|

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DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro U.S. Patent No. 4,541,240 in view of Harris U.S. Patent No. 5,016,438.

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Referring to claim 1, Munro discloses an exhaust system (see the figures and respective portions of the specification). Munro further discloses a housing having a housing wall, an exhaust inlet end (20), and exhaust outlet end (16) opposite from the exhaust inlet end, and including a plurality of space apart, generally V-shaped guides (see Fig. 7) disposed within the housing, adjacent to the exhaust inlet end. Additionally, Munro discloses a non-concentric tube (48), however, does not explicitly describes having a plurality of general parallel, non-concentric tubes disposed longitudinal within the housing, beside one another. Nevertheless, Harris discloses an emission control apparatus, wherein a plurality of general parallel, non-concentric tubes are disposed longitudinally within the housing, besides one another (see figure 3). Since Munro and Harris are in the same field of endeavor regarding exhaust sound systems, the purpose disclosed by Harris would have been recognized in the pertinent art of Munro. It would have been obvious to one of ordinary skill in the art at the time of the invention to include several generally parallel, tubes disposed longitudinally within the housing as taught by Harris within the teaching of Munro for the purpose/advantages that by providing a plurality of non-concentrated tubes the flow of engine exhaust can be diverted creating an improve sound absorption.

As to claim 8, Harris depicts from figure 3 that the tubes include a plurality of perforations (82).

Referring to claims 10 and 11, Munro discloses the use of catalytic converters elements disposed within the housing.

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3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro and Harris as applied to claim 1 above, and further in view of Kazokas U.S. Patent No. 3,061,416.

Referring to claims 12 and 13, Munro and Harris addresses all the limitations of claim 1 above but does not explicitly describes the housing having an outer wall, an inner wall spaced from the outer wall, defining an acoustic insulation volume to dispose acoustic insulation material within the space. Nonetheless, Kazokas discloses a catalytic muffler (see all figures), wherein the canister (muffler) further comprises an outer wall (10) and an inner wall (16) defining an acoustic insulation volume filled with insulation material (see figure 2 and 4).

Since Munro, Harris and Kazokas are in the same field of endeavor regarding exhaust sound systems, the purpose disclosed by Kazokas would have been recognized in the pertinent art of Munro and Harris.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have an extra outer wall defining a volume with the inner wall of a canister as taught by Kazokas within the teaching of Munro and Harris for the purpose/advantages that by creating an additional cavity between an outer wall and inner wall and filling it with insulating material, would add an improved sound absorption to the existing sound attenuating devices inside the cavity (muffler).

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4. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munro and Harris as applied to claim 1 above, and further in view of Meineke et al. U.S. Patent No. 4,164,267.

Referring to claims 12 and 13, Munro and Harris addresses all the limitations of claim 1 above but does not explicitly describe having at least one removable end attachment fitting. On the other hand, Meineke et al. discloses an exhaust muffler (see figure 1) wherein at least one removable end attachment fitting (24) is used to secure the inlet end (tail pipe 22) to the canister (10).

Since Munro, Harris and Meineke et al. are in the same field of endeavor regarding exhaust sound systems, the purpose disclosed by Meineke et al. would have been recognized in the pertinent art of Munro and Harris

It would have been obvious to one of ordinary skill in the art at the time of the invention to use clamps (attachment fittings) to secure the inlet end (tail pipe) as taught by Meineke within the teaching of Munro and Harris for the additional advantages that with the use of clamps any maintenance on the muffler including repairs can be done without involving any other parts of the exhaust system. Moreover, having clamps on the inlet end of the exhaust system can allow the manufacture to provide multiple decorative exterior finishes on the muffler (canister) tip body.

5. Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al. U.S. Patent No. 5,355,973 in view of Meineke et al. U.S. Patent No. 4,164,267.

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Referring to claim 16, Wagner et al. discloses a muffler with catalytic converter arrangements and methods (see all figures and respective portions of the specification). Wagner further describes having a canister (11) including an inlet end (17), a forward portion, a rearward portion and an outlet end (18), a forward inner diameter and a rearward inner diameter. Furthermore, Wagner discloses at least one catalytic converter element (50) installed within the forward portion of the canister (11), said catalytic converter element (50) having an outer diameter and including a substrate (51) having a plurality of passages defined by plurality of walls; a resonator element (65) installed within the rearward portion of the canister (11), said resonator element (65) having a hollow core, a forward end, a rearward end, and outer diameter, and a plurality of sound attenuating perforations (84) formed radially therethrough. Wagner additionally depicts from figure 1, the outer diameter of the resonator element (65) being smaller than the rearward inner diameter of the canister (11) and defining a sound attenuating plenum (85) therebetween; and an inlet end (17) of the canister (11), wherein the plurality of passages of the catalytic converter elements (50), the hollow core of the resonator element (65) and the outlet end of the canister (11) all are axially aligned with one another providing a straight through, low restriction, free flow of engine exhaust.

However, Wagner et al. does not explicitly describes having at least one removable end attachment fitting, removably securing at least the inlet end to the canister.

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On the other hand, Meineke et al. discloses an exhaust muffler (see figure 1) wherein at least one removable end attachment fitting (24) is used to secure the inlet end (tail pipe 22) to the canister (10).

Since Wagner et al. and Meineke et al. are in the same field of endeavor regarding exhaust sound systems, the purpose disclosed by Meineke et al. would have been recognized in the pertinent art of Wagner et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use clamps (attachment fittings) to secure the inlet end (tail pipe) as taught by Meineke within the teaching of Wagner et al. for the additional advantages that with the use of clamps any maintenance on the canister including repairs can be done without involving any other parts of the exhaust system. Moreover, having clamps on the inlet end of the exhaust system can allow the manufacture to provide multiple decorative exterior finishes on the muffler (canister) tip body.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner and Meineke et al. as applied to claim 16 above, and further in view of Kazokas U.S. Patent No. 3,061,416.

Referring to claim 17, Wagner et al. addresses all the limitations of claim 16 above but does not explicitly describe the canister having an outer wall, an inner wall spaced from the outer wall, defining an acoustic insulation volume to dispose acoustic insulation material within the space. Nonetheless, Kazokas discloses a

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catalytic muffler (see all figures), wherein the canister (muffler) further comprises an outer wall (10) and an inner wall (16) defining an acoustic insulation volume filled with insulation material (see figure 2 and 4).

Since Wagner, Meineke and Kazokas are in the same field of endeavor regarding exhaust sound systems, the purpose disclosed by Kazokas would have been recognized in the pertinent art of Wagner and Meineke.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have an extra outer wall defining a volume with the inner wall of a canister as taught by Kazokas within the teaching of Wagner and Meineke for the purpose/advantages that by creating an additional cavity between an outer wall and inner wall and filling it with insulating material, would add an improved sound absorption to the existing sound attenuating devices inside the cavity (muffler).

Allowable Subject Matter

7. Claims 18-20 are allowed.

8. Claims 2-7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if incorporated in the independent claim they depend on, including all of the limitations of the base claim and any intervening claims.

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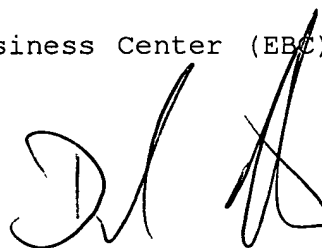
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon-Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Martin can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ECS
October 28, 2004



DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800